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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/868,117

08/20/2001

Robert Schmeler

6077-04WOUS

5845

7590 08/22/2007  
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EXAMINER

WALBERG, TERESA J

ART UNIT

PAPER NUMBER

3744

MAIL DATE

DELIVERY MODE

08/22/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/868,117

Applicant(s)

SCHMELER ET AL.

Examiner

Teresa J. Walberg

Art Unit

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 31-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 31-62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6/14/01.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

### DETAILED ACTION

1. The disclosure is objected to because of the following informalities: On page 3 of the specification, last two lines, the references to specific claim numbers should be deleted, since claims are subject to being cancelled or renumbered. It is noted that the claims specified are no longer present in the application.

Appropriate correction is required.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 31-37, 40-53, and 56-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over MAN (DE 296 11 704, cited by applicants) in view of Stumbough (2,911,235).

MAN discloses a cooling plate for a furnace and process of making including a copper cooling plate body with at least one cooling duct for a cooling medium (Fig. 2), which extends essentially parallel with the back to the plate body (Fig. 2), at least one preformed externally accessible recess (at 4) into which the cooling duct opens, at least one connection piece for a cooling medium connection on the back of the cooling plate body (2), and a formed piece (4) that is fitted in the preformed externally accessible recess in the plate body

MAN does not show the formed piece including a deflection surface for the cooling medium and being a plug which is inserted from the end face and has a beveled end which forms the deflection surface.

Stumbough discloses a fitting including a deflection surface (28) for the material in the tubes and the deflection element being a plug (22) which is inserted from the end face (see Fig. 1) and has a beveled end (28) which forms the deflection surface (Fig. 1).

It would have been obvious in view of Stumbough to use a deflection surface for the cooling medium and being a plug which is inserted from the end face and has a beveled end which forms the deflection surface in the cooling plate of MAN, the motivation being to provide smoother flow of the fluid in the pipes and easier cleaning of the device.

4. Claims 38, 39, 54, and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over MAN (DE 296 11 704, cited by applicants) in view of Stumbough (2,911,235) and further in view of Fukumoto et al (4,097,679).

MAN in view of Stumbough disclose a cooling plate for a furnace and process of making as claimed with the exception of the connection piece serving as a transition piece between different cross sections and shapes of duct.

Fukumoto discloses a cooling plate for a furnace including a connection piece (6) serving as a transition piece between different cross sections and shapes of duct (see Figs. 5 and 6).

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It would have been obvious in view of Fukumoto to provide the cooling plate of MAN with a connection piece serving as a transition piece between different cross sections and shapes of duct, the motivation being to enable connection to differing input line sizes and shapes.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Davy, Mizuno, Udoh, and Lauria et al are cited to show cooling panel structure.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teresa J. Walberg whose telephone number is 571-272-4790. The examiner can normally be reached on M-F 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Teresa J. Walberg  
Primary Examiner  
Art Unit 3744

/tw/